

# HONOLULU ENGINEER DISTRICT

The civil works responsibilities of the Honolulu District encompass the State of Hawaii, the Territory of Guam, the Territory of American Samoa, and the Commonwealth of the Northern Mariana Islands. The

district is unique in that its area of responsibility is totally comprised of islands dispersed over an ocean environment exceeding 6 million square miles.

## IMPROVEMENTS

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## Navigation

### 1. KIKIAOLA SMALL BOAT HARBOR, KAUAI, HAWAII

**Location.** Kikiaola Harbor is located on the southwest coast of the island of Kauai, approximately 1 mile southeast of Kekaha and approximately 2 miles west of Waimea (See NOAA Chart 19386)

**Existing project.** The authorized project consists of removing a 150-foot long portion from an existing outer east stub breakwater; removing and reconstructing a 85-foot long inner east stub breakwater; modifying 220-foot long portion of the existing west breakwater; modifying 820-foot long portion of the existing east breakwater; dredging a new 700-foot long entrance channel to a depth of 11-feet and varying in width from 105 to 205-feet; and dredging a 320-foot long access channel to a 7-foot depth and varying in width from 70 to 105-feet.

**Local cooperation.** The Project Cooperation Agreement (PCA) is being reviewed and negotiated with the local sponsor.

**Terminal facilities.** There is an existing 1,280-foot long east breakwater with two short stub breakwaters; a 600-foot long west breakwater; a 150-foot long by 10-foot wide wooden wharf; a 50-foot long loading dock and adjacent launch ramp, all constructed by the State of Hawaii.

**Operations during fiscal year.** Work during the Fiscal Year included continuation of plans and specifications and environmental coordination. The plans and specifications phase were approximately 97% complete as of September 30, 2001. Total costs incurred during the Fiscal Year were \$111,934.

### 2. MAALAEA HARBOR, MAUI, HAWAII

**Location.** Maalaea Bay is situated on the southwest coast of Maui, approximately 7 miles south of Wailuku, the county seat of Maui. (See NOAA Chart 19350)

**Existing project.** For a description of the existing project, see page 36-3 of the FY89 Annual Report. (See Table 36-B for Authorizing Legislation)

**Local cooperation.** The Project Cooperation Agreement (PCA) is delayed due to resolution of environmental concerns as a result of the Supplemental Environmental Impact Statement. The PCA is being coordinated with the local sponsor for execution prior to construction.

**Terminal facilities.** There is an existing 1,000-foot long south breakwater, a 870-foot long east breakwater, 300-foot long wharf, 90-foot wide entrance channel, and a single lane launch ramp, all constructed by the State of Hawaii.

**Operations during fiscal year.** Work during the Fiscal Year included continuing coordination with the local sponsor and various agencies on controversial environmental issues, continuing development of acceptable mitigation features for impacts to environmental resources and performing a physical model study of the alternatives to address environmental concerns. Total costs incurred during the Fiscal Year were \$202,060. The plans and specifications phase was approximately 90% complete as of September 30, 2001.

### 3. RECONNAISSANCE AND CONDITION SURVEYS

Condition surveys were conducted by contract at Barbers Point Harbor, Honolulu Harbor, Haleiwa Small Boat Harbor, Waianae Small Boat Harbor, island of Oahu; Kahului Harbor, island of Maui; Kaunakakai Harbor, island of Molokai; Nawiliwili Harbor, island of Kauai; Manele Bay, island of Lanai; Agat Small Boat Harbor, Agana Small Boat Harbor, Guam; and Rota Harbor, Commonwealth of Northern Marianas during Fiscal Year 2001. Total cost to conduct these surveys was \$158,614. See Table 31-H for navigation inspections performed during the Fiscal Year.

### 4. INSPECTION OF COMPLETED FLOOD CONTROL AND BEACH EROSION CONTROL PROJECTS

Inspection of completed local flood protection projects is performed periodically in compliance with Section 208.10, of Title 33, Code of Federal Regulations, which contains regulations for operation and maintenance of local flood-protection works approved by the Secretary of the Army in accordance with authority in Section 3, Flood Control Act of June 22, 1936.

Inspection costs for completed flood control and beach erosion control projects incurred during the Fiscal Year were \$164,255. See Table 31-I for inspections performed during the Fiscal Year.

### 5. NAVIGATION WORK UNDER

## SPECIAL AUTHORIZATION

**Navigation activities pursuant to Section 107, Public Law 86-645, as amended (Preauthorization).**

See Table 31-J.

## 6. BEACH EROSION WORK UNDER SPECIAL AUTHORIZATION

**Emergency streambank and shoreline protection activities pursuant to Section 14, Public Law 79-526, as amended (Preauthorization).** See Table 31-K.

**Beach Erosion control activities pursuant to Section 103, Public Law 87-874, as amended (Preauthorization).** See Table 31-L.

## Flood Control

## 7. FLOOD CONTROL WORK UNDER SPECIAL AUTHORIZATION

**Flood control activities pursuant to Section 205, Public Law 80-858, as amended (Preauthorization).** See Table 31-M.

**Project Modifications for Improvements of Environment pursuant to Section 1135, Public Law 99-662, as amended (Preauthorization).**

Fiscal year costs were \$15,695 for Kaunakakai Stream, Molokai; \$27,545 for Kawainui Marsh, Oahu; \$911 to conduct initial appraisal reports; and \$2,029 for coordination with local agencies.

**Aquatic Ecosystem Restoration pursuant to Section 206, Public Law 104-303. (Preauthorization)**

Fiscal year costs were \$189,125 for Kaunakakai Harbor, Molokai; \$88,447 for Saipan Lagoon, CNMI; and \$2,389 for coordination with other agencies.

**Emergency flood control activities pursuant to Public Law 84-99.**

Federal cost during the fiscal year for Flood Control and Coastal Emergencies appropriation was \$642,800 of which \$394,994 was for disaster preparedness; and \$38,820 for emergency operations; \$119,318 for field investigations; \$64,631 for rehabilitation, and \$25,035 for continuing eligibility inspections.

## General Investigations

## 8. SURVEYS

Fiscal year costs were \$758,069 of which \$331,588 was for navigation studies; -\$24,773 was for flood damage prevention studies; \$206,098 for special studies; \$49,115 for miscellaneous activities; and \$196,041 for coordination with other agencies. In addition, \$97,201 in non-Federal funds for coordination with other agencies; \$28,621 for cost-shared flood damage prevention studies; \$231,507 for cost-shared navigation studies; and \$8,847 for cost-shared special studies.

## 9. COLLECTION AND STUDY OF BASIC DATA

**Flood plain management services.** The Flood Plain Management Services Program is authorized and implemented under Section 206, PL 86-645, 1960 Flood Control Act, as amended. Through technical services and planning guidance, the program provides information on floods and flood related information to improve planning for the careful use of the nation's flood plains, thereby reducing the potential for losses to life and property from floods and wave actions. Non-Federal agencies are assisted with flood hazard evaluation and planning information for flood and coastal hazard areas without charge.

As of November 1991, Federal agencies and private entities were also offered these services on a cost recovery basis. This assistance is in the form of local flood plain regulations, National Flood Insurance Requirements, and Executive Order 11988 requirements for federal agencies. Such assistance may include flood information and timing, floodwater velocity, extent of flooding, duration of flooding, flood frequency and regulatory floodway limits.

**Services accomplished during fiscal year.** Requests and responses for technical services and planning assistance totaled 2,039, which included services to Federal agencies, state and local government agencies, individuals, realtors, corporations, lending institutions, engineers, architects and other private parties. Costs for providing these services during the fiscal year were \$494,664.

**Hydrologic Studies.** Storm studies cost was \$26,264. Total costs for collection and study of basic data during the fiscal year were \$520,928.

**10. PRECONSTRUCTION  
ENGINEERING AND DESIGN**

**Kaumalapau Harbor, Lanai, HI** – As directed by the Energy and Water Development Appropriations Act of 1998, preconstruction engineering and design studies

were continued in Fiscal Year 2001. Work during the Fiscal Year consisted of continued coordination with the local sponsor and other interested parties; continued preparation of environmental documentation and construction plans and specifications. Total costs incurred during the Fiscal Year were \$21,116.

HONOLULU DISTRICT

**TABLE 31-A COST AND FINANCIAL STATEMENT**

See Section In Text	Project	Funding	FY98	FY99	FY00	FY01	Total Cost to Sept. 30, 2001
1.	Kikiaola Small Boat Harbor, Kauai, HI (Federal Funds)	New Work: Approp. Cost	218,000 183,846	100,000 140,237	75,000 60,330	627,000 108,409	1,922,000 1,354,884
2.	Maalaea Harbor Maui, HI (Federal Funds)	New Work: Approp. Cost	649,000 575,013	372,000 330,836	484,000 602,203	325,000 202,060	4,074,700 3,909,683

**TABLE 31-B** **AUTHORIZING LEGISLATION**

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HONOLULU DISTRICT

**TABLE 31–C OTHER AUTHORIZED NAVIGATION PROJECTS**

Project	Status	For Last Full Report See Annual Report for:	Cost to September 2001	
			Construction	Operations and Maintenance
Agana Small Boat Harbor, Guam	Completed	1978	\$ 937,798 <sup>1</sup>	\$ 52,555
Agat Harbor, Guam	Completed	1989	2,000,000 <sup>2</sup>	---
Auasi Harbor, American Samoa	Completed	1982	1,033,015 <sup>3</sup>	141,797
Aunuu Harbor, American Samoa	Completed	1982	1,783,129 <sup>4</sup>	1,413,179
Barbers Point Harbor, Oahu, Hawaii	Completed	1990	53,519,193 <sup>5</sup>	2,247,953
Haleiwa Small Boat Harbor, Oahu, Hawaii	Completed	1978	527,047 <sup>6</sup>	498,402
Hilo Harbor, Hawaii, Hawaii	Completed	1991	5,512,440	4,106,308
Honokohau Small Boat Harbor, Hawaii, Hawaii	Completed	1971	781,036 <sup>7</sup>	63,693
Honolulu Harbor, Oahu, Hawaii	Completed	1985	16,044,095 <sup>8</sup>	4,803,957
Kahului Beach Road, Maui, Hawaii	Completed	1976	751,867 <sup>9</sup>	---
Kahului Harbor, Maui, Hawaii	Completed	1984	7,203,221 <sup>10</sup>	8,222,952
Kalaupapa Harbor, Molokai, Hawaii	Completed	1968	157,997 <sup>9</sup>	3,127
Kaulana Bay Boat Harbor, Hawaii, Hawaii	Inactive	1990	171,400	---
Kawaihae Harbor, Hawaii, Hawaii	Completed	1998	12,043,839 <sup>11</sup>	61,800
Keehi Lagoon, Oahu, Hawaii	Completed	1956	3,348,000 <sup>12</sup>	41,857
Kikiaola Small Boat Harbor, Kauai, Hawaii	Active	1981	193,000	---
Laupahoehoe Harbor, Hawaii, Hawaii	Completed	1990	3,623,450 <sup>13</sup>	---
Manele Bay Small Boat Harbor, Lanai, Hawaii	Completed	1986	372,000 <sup>14</sup>	495,256
Nawiliwili Harbor, Kauai, Hawaii	Completed	1987	2,127,724 <sup>15</sup>	11,047,279
Nawiliwili Small Boat Harbor, Kauai, Hawaii	Completed	1976	584,513 <sup>16</sup>	30,707
Ofu Small Boat Harbor, American Samoa	Completed	1976	980,018 <sup>17</sup>	5,054,930
Pohoiki Bay, Hawaii, Hawaii	Completed	1979	432,523 <sup>9</sup>	---
Port Allen Harbor, Kauai, Hawaii	Completed	1984	752,645 <sup>18</sup>	3,081,225
Rota Harbor, CNMI	Completed	1985	2,000,000 <sup>19</sup>	436,200
Saipan Small Boat Harbor, CNMI	Deferred	1982	194,000	---
Tau Small Boat Harbor, American Samoa	Completed	1985	1,991,569 <sup>20</sup>	546,600
Waianae Small Boat Harbor, Oahu, Hawaii	Completed	1979	1,940,011 <sup>21</sup>	122,400
Welles Harbor, Midway Island	Completed	1950	2,448,056 <sup>22</sup>	2,111

<sup>1</sup> Authorized by the Chief of Engineers. In addition, Contributed Funds of \$282,474 for Construction.

<sup>2</sup> In addition, Contributed Funds of \$1,239,364 for Construction.

<sup>3</sup> Authorized by the Chief of Engineers. In addition, Contributed Funds of \$86,563 for Construction.

<sup>4</sup> Authorized by the Chief of Engineers. In addition, Contributed Funds of \$231,437 for Construction.

<sup>5</sup> In addition, Contributed Funds of \$2,402,909 for Construction.

<sup>6</sup> Authorized by the Chief of Engineers. In addition, Contributed Funds of \$410,077 for Construction and \$84,388 for Operation and Maintenance.

<sup>7</sup> In addition, Contributed Funds of \$630,568 for Construction.

<sup>8</sup> In addition, Contributed Funds of \$201,282 for Construction.

<sup>9</sup> Authorized by the Chief of Engineers.

<sup>10</sup> In addition, Contributed Funds of \$30,200 for Construction.

<sup>11</sup> In addition, Contributed Funds of \$499,328 for Construction.

<sup>12</sup> Abandonment authorized by R & H Act of 1965 (HD 98, 89th Congress, 1st Session).

<sup>13</sup> Authorized by the Chief of Engineers. In addition, Contributed Funds of \$364,757 for Construction.

<sup>14</sup> In addition, Contributed Funds of \$370,845 for Construction.

<sup>15</sup> In addition, Contributed Funds of \$223,261 for Construction.

<sup>16</sup> Authorized by the Chief of Engineers and completed in November 1974. In addition, Contributed Funds of \$405,471 for Construction.

<sup>17</sup> Authorized by the Chief of Engineers. In addition, Contributed Funds of \$61,953 for Construction.

<sup>18</sup> In addition, Contributed Funds of \$200,000 for Construction.

<sup>19</sup> Authorized by the Chief of Engineers. In addition, Contributed Funds of \$774,373 for Construction.

<sup>20</sup> Authorized by the Chief of Engineers. In addition, Contributed Funds of \$54,034 for Construction.

<sup>21</sup> In addition, Contributed Funds of \$1,791,068 for Construction.

<sup>22</sup> Completed in 1941 and Maintenance transferred to Department of Navy.

**REPORT OF THE SECRETARY OF THE ARMY ON CIVIL WORKS ACTIVITIES FOR FY 2001**

**TABLE 31–D OTHER AUTHORIZED BEACH EROSION CONTROL PROJECTS**

Project	Status	For Last Full Report See Annual Report for:	Cost to September 2001	
			Construction	Operations and Maintenance
Afono Area and Aoia Area, American Samoa	Completed	1978	\$ 254,015 <sup>1</sup>	\$ ---
Alii Drive, Hawaii, Hawaii	Completed	2000	229,000 <sup>16</sup>	---
Asquiroga Bay, Guam	Completed	1986	227,181 <sup>2</sup>	---
Haleiwa Beach, Oahu, Hawaii	Completed	1967	240,148 <sup>3</sup>	---
Kaaawa Beach, Oahu, Hawaii	Completed	1976	176,488 <sup>4</sup>	---
Kapaa Town, Kauai, Hawaii	Completed	1977	158,916 <sup>5</sup>	---
Kekaha Beach, Kauai, Hawaii	Completed	1981	999,996 <sup>6</sup>	---
Kihei Beach, Maui, Hawaii	Completed	1972	154,313 <sup>7</sup>	---
Kualoa Regional Park, Oahu, Hawaii	Terminated	1982	355,472 <sup>8</sup>	---
Lepua Area, American Samoa	Completed	1992	1,706,225 <sup>9</sup>	---
Masefau Bay, American Samoa	Completed	1992	500,000 <sup>2</sup>	---
Matafao Shoreline, American Samoa	Completed	1984	225,000 <sup>2</sup>	---
Ofu Airstrip, American Samoa	Completed	1987	189,500	---
Pago Pago Airport, American Samoa	Completed	1984	174,941 <sup>2</sup>	---
Pago Pago to Nuuuuli, American Samoa	Deferred	1978	394,187 <sup>10</sup>	---
Poloa Area, American Samoa	Completed	1978	136,040 <sup>11</sup>	---
Saipan Beach Road, CNMI	Completed	1992	176,000 <sup>2</sup>	---
Sand Island, Oahu, Hawaii	Completed	1981	301,879 <sup>12</sup>	---
Sand Island Shore Protection, Oahu, Hawaii	Completed	1992	1,313,400 <sup>13</sup>	---
Vatia Area, American Samoa	Completed	1978	154,309 <sup>14</sup>	---
Waikiki Beach, Oahu, Hawaii	Deferred	1979	729,087 <sup>15</sup>	183,000

<sup>1</sup>Authorized by the Chief of Engineers. In addition, \$209,549 in Contributed Funds.

<sup>2</sup>Authorized by the Chief of Engineers.

<sup>3</sup>In addition, \$160,098 in Contributed Funds.

<sup>4</sup>Authorized by the Chief of Engineers. In addition, \$97,075 in Contributed Funds.

<sup>5</sup>Authorized by the Chief of Engineers. In addition, \$56,916 in Contributed Funds.

<sup>6</sup>Authorized by the Chief of Engineers. In addition, \$1,672,524 in Contributed funds.

<sup>7</sup>Authorized by the Chief of Engineers. In addition, \$1,672,524 in Contributed Funds.

<sup>8</sup>Authorized by the Chief of Engineers and terminated in April 1980 as a Circuit Court ruled sand mining to be illegal. In addition, \$177,300 in Contributed Funds.

<sup>9</sup>Authorized by the Chief of Engineers. In addition, \$485,371 in Contributed Funds.

<sup>10</sup>Authorized by the Chief of Engineers. In addition, \$312,480 in Contributed Funds.

<sup>11</sup>Authorized by the Chief of Engineers. In addition, \$101,547 in Contributed Funds.

<sup>12</sup>Authorized by the Chief of Engineers. In addition, \$255,728 in Contributed Funds.

<sup>13</sup>Authorized for construction by Public Law 100D71. In addition, \$1,226,486 in Contributed Funds.

<sup>14</sup>Authorized by the Chief of Engineers. In addition, \$132,075 in Contributed Funds

<sup>15</sup>In addition \$82,000 in Advanced Funds and \$17,640 in Contributed Funds.

<sup>16</sup>Authorized by the Chief of Engineers. In addition, \$126,000 in Contributed Funds



HONOLULU DISTRICT

**TABLE 31-E OTHER AUTHORIZED FLOOD CONTROL PROJECTS**

Project	Status	For Last Full Report See Annual Report for:	Cost to September 2001	
			Construction	Operations and Maintenance
Agana River, Guam	Inactive	1989	\$ 250,000	\$ ---
Alenaio Stream, Hawaii, Hawaii	Completed	1997	14,703,517 <sup>7</sup>	---
Asan Village, Guam	Completed	1986	1,275,500	---
Hanapepe River, Kauai, Hawaii	Completed	1967	784,867 <sup>1</sup>	---
Iao Stream, Maui, Hawaii	Completed	1985	12,621,108	356,523
Kahawainui Stream, Oahu, Hawaii	Completed	1998	4,672,021 <sup>2</sup>	---
Kahoma Stream, Maui, Hawaii	Completed	1990	10,988,750 <sup>3</sup>	---
Kaneohe-Kailua Area, Oahu, Hawaii	Completed	1985	25,552,400 <sup>4</sup>	---
Kaunakakai Stream, Molokai, Hawaii	Completed	1950	73,478 <sup>5</sup>	---
Kawainui Marsh, Oahu, Hawaii	Completed	1987	4,345,899 <sup>8</sup>	---
Kawainui Swamp, Oahu, Hawaii	Completed	1967	1,265,567	---
Kuliouou Stream, Oahu, Hawaii	Completed	1971	1,000,000 <sup>6</sup>	---
Namo River, Guam	Completed	1982	2,416,314 <sup>5</sup>	---
Paauau Stream, Hawaii, Hawaii	Completed	1985	1,978,514	---
Wailoa Stream and Tributaries, Hawaii, Hawaii	Completed	1966	1,044,888	---

<sup>1</sup>In addition, \$11,953 in Contributed Funds.

<sup>2</sup>Authorized by the Chief of Engineers. In addition, \$679,205 in Contributed Funds.

<sup>3</sup>In addition, \$645,992 in Contributed Funds.

<sup>4</sup>Includes Non-Federal reimbursement of recreation construction cost of \$5,668,300. In addition, \$8,175 in Contributed Funds.

<sup>5</sup>Authorized by the Chief of Engineers.

<sup>6</sup>Authorized by the Chief of Engineers. In addition, \$540,335 in Contributed Funds.

<sup>7</sup>In addition, \$4,479,588 in Contributed Funds.

<sup>8</sup>Authorized by the Chief of Engineers. In addition, \$1,234,147 in Contributed Funds.

**TABLE 31-F OTHER AUTHORIZED MULTIPLE PURPOSE PROJECTS, INCLUDING POWER**

Project	Status	For Last Full Report See Annual Report for:	Cost to September 2001	
			Construction	Operations and Maintenance
Nanpil River Hydropower, Pohnpei, Federated States of Micronesia	Completed	1994	\$ 8,000,000	\$ ---

**REPORT OF THE SECRETARY OF THE ARMY ON CIVIL WORKS ACTIVITIES FOR FY 2001**

**TABLE 31–G                                      DEAUTHORIZED PROJECTS**

<b>Project</b>	<b>For Last Full Report See Annual Report for:</b>	<b>Date and Authority</b>	<b>Federal Funds Expended</b>	<b>Contributed Funds Expended</b>
Ala Wai Harbor, Oahu, Hawaii	1976	November 1986 PL 99-662	\$ 40,117	\$ ---
Hana Small Boat Harbor, Maui, Hawaii	1967	November 1977 HD #94-413	---	---
Hanalei Small Boat Harbor, Kauai, Hawaii	1967	November 1981 HD #97-59	---	---
Hanapepe Bay, Kauai, Hawaii	1965	November 1986 PL 99-662	---	---
Heeia–Kea Small Boat Harbor, Oahu, Hawaii	1972	January 1990 PL 99-662	1,481	---
Kailua Small Boat Harbor, Oahu, Hawaii	1967	January 1990 PL 99-662	---	---
Kaimu Black Sand Beach, Hawaii, Hawaii	1975	July 1981 Director of Civil Works	86,235	---
Kapaakea Homestead Flood Control, Molokai, Hawaii	1979	July 1981 Director of Civil Works	221,500	---
Kaunakakai Deep Draft Harbor, Molokai, Hawaii	1966	January 1990 PL 99-662	133,188	292,441
Kaunakakai Small Draft Harbor, Molokai, Hawaii	---	January 1990 PL 99-662	---	---
Kewalo Harbor, Oahu, Hawaii	1976	September 1975 Director of Civil Works	98,800	---
Lahaina Small Boat Harbor, Maui, Hawaii	1977	January 1990 PL 99-662	186,937	---
Maunalua Bay Small Boat Harbor, Oahu, Hawaii	1972	January 1990 PL 99-662	30,378	---
Nawiliwili Deep Draft Harbor, Kauai, Hawaii	---	January 1990 PL 99-662	---	---
Rainmaker Hotel, American Samoa	---	November 1991 PL 99-662	---	---
Reeds Bay Small Boat Harbor, Hawaii, Hawaii	1967	January 1990 PL 99-662	---	---

**TABLE 31–G (Contd.)****DEAUTHORIZED PROJECTS**

<b>Project</b>	<b>For Last Full Report See Annual Report for:</b>	<b>Date and Authority</b>	<b>Federal Funds Expended</b>	<b>Contributed Funds Expended</b>
Saipan Harbor, Northern Marianas	---	November 1991 PL 99-662	---	---
Talofofo Bay Shore Protection, Guam	---	August 1981 Director of Civil Works	80,764	---
Waimea Beach, Kauai, Hawaii	---	November 1986 PL 99-662	---	---
Wake Island Harbor, Wake Island	1950	November 1986 PL 99-662	---	---

**TABLE 31–H****INSPECTION OF COMPLETED  
NAVIGATION PROJECTS**

<b>Location</b>	<b>Dates of Inspection</b>
<b>Navigation Projects</b>	
Agana Small Boat Harbor, Guam	March 2001
Agat Small Boat Harbor, Guam	March 2001
Auasi Small Boat Harbor, American Samoa	February 2001
Barbers Point Harbor, Oahu, Hawaii	September 2001
Haleiwa Small Boat Harbor, Oahu, Hawaii	July 2001
Hilo Harbor, Hawaii, Hawaii	August 2001
Honokohau Small Boat Harbor, Hawaii, Hawaii	March 2001
Kahului Deep Draft Harbor, Maui, Hawaii	August 2001
Kaulapapa Barge Harbor, Molokai, Hawaii	October 2000
Kawaihae Deep Draft Harbor, Hawaii, Hawaii	March 2001
Kawaihae Small Boat Harbor, Hawaii, Hawaii	March 2001
Laupahoe Harbor, Hawaii, Hawaii	August 2001
Nawiliwili Deep Draft Harbor, Kauai, Hawaii	August 2001
Nawiliwili Small Boat, Kauai, Hawaii	September 2001
Ofu Small Boat Harbor, American Samoa	January 2001
Pohoiki Launch Ramp Facility, Hawaii, Hawaii	January 2001
Port Allen Harbor, Kauai, Hawaii	March 2001
Rota Harbor, CNMI	May 2001
Tau Small Boat Harbor, American Samoa	February 2001
Waianae Small Boat Harbor, Oahu, Hawaii	July 2001

**TABLE 31–I****INSPECTION OF COMPLETED FLOOD CONTROL**

**REPORT OF THE SECRETARY OF THE ARMY ON CIVIL WORKS ACTIVITIES FOR FY 2001**

**AND BEACH EROSION CONTROL PROJECTS**

<b>Location</b>	<b>Dates of Inspection</b>
<b>Flood Control Projects</b>	
Alenaio Stream, Hawaii, Hawaii	November 2000
Asan Village, Guam	April 2001
Hanapepe River, Kauai, Hawaii	November 2000
Iao Stream, Maui, Hawaii	November 2000
Kahawainui Stream, Oahu, Hawaii	October 2000
Kahoma Stream, Maui, Hawaii	November 2000
Kaneohe-Kailua Dam, Oahu, Hawaii	October 2000
Kaunakakai Stream, Molokai, Hawaii	October 2000
Kawainui Marsh, Oahu, Hawaii	October 2000
Kuliouou Stream, Oahu, Hawaii	October 2000
Namo River, Guam	April 2001
Paaau Stream, Hawaii, Hawaii	November 2000
Wailoa Stream, Hawaii, Hawaii	November 2000
Waimea River, Kauai, Hawaii	November 2000
<b>Beach Erosion Control Projects</b>	
Afono Area, American Samoa	February 2001
Alii Drive, Hawaii, Hawaii	September 2001
Aoa Area, American Samoa	February 2001
Asquiroga Bay, Guam	May 2001
Haleiwa Beach Park, Oahu, Hawaii	October 2000
Kaaawa Beach Park, Oahu, Hawaii	October 2000
Kahului Bay, Maui, Hawaii	December 2000
Kahului Wastewater Facility Shoreline, Maui, Hawaii	November 2000
Kapaa Beach, Kauai, Hawaii	November 2000
Kekaha Beach, Kauai, Hawaii	November 2000
Kihei Beach, Maui, Hawaii	December 2000
Lepua Area, American Samoa	February 2001
Masefau Bay, American Samoa	February 2001
Matafao Shoreline, American Samoa	February 2001
Ofu Airstrip, American Samoa	February 2001
Pago to Nuuuli, American Samoa	February 2001
Poloa Area, American Samoa	February 2001
Sand Island, Oahu, Hawaii	September 2001
Vatia Area, American Samoa	February 2001
Waikiki Beach, Oahu, Hawaii	September 2001

**TABLE 31–J                      NAVIGATION ACTIVITIES PURSUANT TO  
SECTION 107, PUBLIC LAW 86-645, AS AMENDED**

**(PREAUTHORIZATION)**

Study	Fiscal year Costs
Kahului Small Boat Harbor, Maui, Hawaii	54,761
Kukuiula Harbor, Kauai, Hawaii	10,364
Keehi Lagoon, Oahu, Hawaii	3,826
Rota East Harbor, CNMI	142,311
Coordination Account	2,530
TOTAL	\$213,792

**TABLE 31-K      EMERGENCY STREAMBANK AND SHORELINE  
PROTECTION ACTIVITIES  
PURSUANT TO SECTION 14,  
PUBLIC LAW 79-526, AS AMENDED  
(PREAUTHORIZATION)**

Study	Fiscal year Costs
Alii Drive, Hawaii, Hawaii	\$2,125
Hauula Highway, Oahu, Hawaii	5,010
Kaaawa Highway, Oahu, Hawaii	5,124
Launiupoko, Maui, Hawaii	45,833
Power Plant Road, Guam	32
Punaluu Highway, Oahu, Hawaii	5,010
South Agat, Guam	9,686
Talofofo Bay, Guam	1,349
Coordination Account	2,923
TOTAL	\$77,092

**TABLE 31-L      BEACH EROSION CONTROL ACTIVITIES  
PURSUANT TO SECTION 103  
PUBLIC LAW 87-874, AS AMENDED  
(PREAUTHORIZATION)**

Study	Fiscal year Costs
Commercial Port Road, CNMI	\$63,886
F-1 Fuel Pier, Guam	23,041
Inarajan, Guam	360
Leloaloe, American Samoa	1,448
Coordination Account	2,814
TOTAL	\$91,549

**TABLE 31-M      FLOOD CONTROL ACTIVITIES  
PURSUANT TO SECTION 205,**

**REPORT OF THE SECRETARY OF THE ARMY ON CIVIL WORKS ACTIVITIES FOR FY 2001**

**PUBLIC LAW 80-858, AS AMENDED  
(PREAUTHORIZATION)**

<b>Study</b>	<b>Fiscal year Costs</b>
Keopu-Hienaloli Stream, Hawaii, Hawaii	\$11,569
Kuliouou Stream, Oahu, Hawaii	17,617
Waiakea Stream, Hawaii, Hawaii	14,256
Waialele Stream, Oahu, Hawaii	29,237
Coordination Account	2,269
<b>TOTAL</b>	<b>\$74,948</b>

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# ALASKA DISTRICT

This District consists of the State of Alaska.

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## Navigation

### 1. ANCHORAGE HARBOR, AK

**Background.** For details, see Annual Report for FY00.

**Operations during fiscal year.** Maintenance dredging by contract was conducted from May until the end of October. A total of 451,431 cubic yards was removed from the project in FY 01. The first year of the 2-year continuing contract was carried out by General Construction Company of Poulsbo, Washington.

### 2. COOK INLET NAVIGATION, AK

**Location.** Southern flank of Knik Arm Shoal about 6 miles southwest of Anchorage, AK.

**Existing project.** Navigation channel 310-meters (1,017) feet wide, 11.5 meters (38-feet) deep, about 3,330-meters (10,925-feet) long. Limiting natural depths along the navigation range line are about 9.0 meters for a width of 1,000 meters; an additional 60-meters width for advance maintenance is authorized.

**Local cooperation.** Fully complied with.

**Terminal facilities.** This project would reduce delays for the container ships that supply cargo for 80 percent of the Alaskan people. Ships have to wait for high tide to safely cross the Knik Arm Shoal and would rarely have to wait once the authorized channel is complete.

**Operations during fiscal year.** The PCA was executed on 9 Jan 98. Construction contract was awarded on 2 Dec 98 and was completed in September 2000 for a combined Federal and Contributed Cost of \$10,507,100. A total of 1,459,543 cubic yards were removed in the two seasons of dredging by Manson Construction.

### 3. CHIGNIK HARBOR, AK

**Location.** The city of Chignik is located on the south side of the Alaska Peninsula about 450 miles southwest of Anchorage.

**Existing project.** The city of Chignik is situated on the south shore of Alaska Peninsula in Southwestern Alaska. It is an active and growing island port whose economy is heavily dependent on commercial fishing. The local fleet presently anchors in the ice free, but inadequately protected harbor or ties up at the exposed city dock. At present boats are subject to overcrowding and hazardous mooring conditions between fishing periods. The anchorage is exposed to all storms from the southeast clockwise to the northwest. The violent southeast

and northwest storms often damage and sometimes destroy boats by forcing them ashore or on the exposed rock reefs at low tides.

**Local cooperation.** Fully complied with.

**Terminal facilities.** The proposed project would provide a protected harbor, which would produce benefits in the form of reduced boat damage, increased fish harvest, and a harbor of refuge. The average annual navigation benefits attributable to the project are currently estimated at \$1,695,400.

**Operations during fiscal year.** Endangered species coordination was completed during Fiscal Year 2000. The PCA was executed on 18 August 2000. A construction contract was awarded on 20 August 2001 for \$6,549,270.

### 4. DILLINGHAM HARBOR, AK

**Location.** Dillingham Harbor is located at the head of Nushagak Bay, an arm of Bristol Bay, on the right bank of Nushagak River, just below its confluence with Wood River; about 470 miles northeast of Dutch Harbor and 300 miles southwest of Anchorage. (See NOAA/NOS Chart #16660.)

**Existing project.** A small-boat basin 230,000 square feet in area with a depth of 0.0 feet mean lower low water along Scandinavian Creek with an entrance channel 250 feet long and 40 feet wide in Scandinavian Creek and a rock sill across its outlet. Tidal range between mean lower low water and mean higher high water is 19.8 feet. Extreme range is 30 feet.

**Local cooperation.** Fully complied with.

**Terminal facilities.** There are four docks at the city of Dillingham; three privately owned, one owned by the city. Four publicly owned small boat floats located in the Harbor basin were installed in June 1982. They are removed before fall freezeup and replaced each spring. Facilities are inadequate for the number of boats using the harbor.

**Operations during fiscal year.** Annual maintenance dredging was carried out by Nehalem River Dredging in June with the removal of 101,076 cubic yards. This was year 1 of a 2-year continuing contract.

### 5. FALSE PASS, AK

**Location.** False Pass is a small community located on the east side of Unimak Island, which is the east end of the Aleutian Island chain in Southwest Alaska. False Pass is approximately 700 air miles from Anchorage.

**Existing project.** The recommended plan will accommodate a fleet of 88 vessels in a 5.2-acre basin protected by two rubble-mound breakwaters, 1,300 feet and 600 feet in length. The project will require dredging of the inner basin and



the entrance channel. Plans and specifications are being completed for construction in Fiscal Year 2003.

**Local cooperation.** Fully complied with.

**Operation during fiscal year.** The feasibility study was initiated in 1999. The project was authorized in the Water and Resources Development Act of 2000. Plans and specifications are currently being developed.

## 6. HOMER HARBOR, AK

**Background.** For details, see Annual Report for FY00.

**Operation during fiscal year.** Maintenance: Annual maintenance dredging was carried out by Nehalem River Dredging in September with the removal of approximately 5,000 cubic yards. This was year 1 of a 2-year continuing contract.

## 7. KAKE HARBOR, AK

**Location.** Kake, a community of 700, is located in Southeastern Alaska about 40 miles west of Petersburg and 800 miles northwest of Seattle.

**Existing project.** Commercial fishing and logging are the primary industries in the area. A feasibility report was completed in 1968, and the recommended project was authorized for construction. The authorized project, adjacent to the city, was estimated to cost \$13.2 million in 1986 dollars. The project includes construction of a rubblemound breakwater at the Portage Cove site. The average annual benefits amount to \$785 thousand, all for commercial navigation. The benefit to cost ratio is 1.5, based on the authorized interest rate. The city of Kake is the local sponsor, with financial support from the State.

**Local cooperation.** A Project Cooperation Agreement was signed on 26 Nov 1997.

**Operation during fiscal year.** Construction contract was awarded on 29 April 1998 to Kake Tribal Logging & Timber Corporation for \$14,554,257. The breakwater is physically completed in October 2000 at a total cost of \$15,825,588.

## 8. NINILCHIK HARBOR, AK

**Background.** For details, see Annual Report for FY00.

**Operation during fiscal year.** Maintenance: Annual maintenance dredging was carried out by Nehalem River Dredging in September with the removal of 8,554 cubic yards. This was year 1 of a 2-year continuing contract.

## 9. NOME HARBOR, AK

**Location.** Nome Harbor is located at the mouth of the Snake River at the city of Nome, AK, on the northerly shore of Norton Sound, an arm of the Bering Sea. It is a shallow open roadstead, 581 nautical miles north of Dutch Harbor and 545 air miles northwest of Anchorage. (See NOAA/NOS Chart #16206.)

**Existing project.** The federal navigation project, at 8 feet below mean lower low water, consists of a dogleg entrance channel 75 feet wide by 1550 feet long running from Norton Sound to a turning basin 250 feet wide by 600 feet long, located at the confluence of the Snake River with Dry and Bourbon Creeks. The entrance is flanked to seaward by a 400 foot eastern jetty and a 240 foot western jetty and is further protected through its length by a steel sheet pile revetment on both sides. The eastern waterfront is protected by a 3350-foot long seawall that extends from the eastern jetty. Range between mean lower low water and mean higher high water is 1.6 feet and extreme tidal range is 7.5 feet, but water levels are influenced more by wind than tide. Levels of 5 feet below mean lower low water have been observed during offshore winds, and a level of 14 feet above mean lower low water has been observed during a southerly storm.

**Local cooperation.** Fully complied with.

**Terminal facilities.** Cargoes and passengers from ocean vessels are lightered to and from shore, a distance of about 2 miles. Traffic enters the dredged channel and is handled over revetment, where a lighterage company has transfer facilities that are open to the public. Facilities are considered inadequate for existing commerce. In July 1984, the city of Nome received Department of Army authorization (permit) to construct a 3,600-foot gravel filled causeway. Construction of the causeway began in July 1985. Due to lack of complete funding, the length of the causeway was shortened to 2,700 feet. Construction was completed in May 1987. Use of this causeway for off-loading petroleum products was delayed until the September 1987 arrival of a required berthing barge.

**Operations during fiscal year.** Received authorization for a project consisting of a harbor complex that includes a new breakwater that protects the existing causeway docks. Provides for a new entrance to the existing small boat harbor and a sediment management scheme to keep the channel open. Initial Construction funds were appropriated in FY 2001. Plans and

specifications are being developed and the PCA has been negotiated with the City of Nome.

Annual maintenance dredging was carried out in the outer portion of the entrance channel in June with the removal of 5,000 cubic yards. Emergency dredging at the end of July removed an additional 3,000 cubic yards. The work was accomplished by Portable Hydraulic Dredging of Portland, Oregon. This was year 2 of a 3-year continuing contract.

## 10. SAND POINT, AK

**Location.** Sand Point is a commercial fishing community on the Pacific coast off the southwestern Alaska Peninsula. Sand Point is about 570 air miles southwest of Anchorage and about midway between Kodiak and Dutch Harbor. The harbor provides close access to one of the State's most productive fishing areas. For the past few years the population has been stable at around 1,000. The economy is based almost wholly on commercial fishing.

This study is in partial response to the Rivers and harbors in Alaska study resolution, adopted by the U.S. House of Representatives Committee on Public Works on 2 December 1970. The study was requested by the Aleutians East Borough to investigate navigation improvements at Sand Point, Alaska.

The harbor currently provides no permanent protected moorage for vessels larger than 80 feet. In recent years, the fleet operating in the Bering Sea/Aleutian Island area, made up primarily of vessels ranging from 80 to 160 feet, has grown significantly. Skippers fishing in the Sand Point area currently travel long distances to secure protected moorage.

**Existing Project.** The proposed harbor improvements at Sand Point consist of construction of a 570-foot and a 730-foot breakwater from shore to form the basin and entrance channel of the new harbor. The crest height of the rubblemound breakwaters would be +16 ft MLLW. The breakwaters would be designed to withstand the forces of a 6.6-foot wave. The entrance channel would be dredged to -18 ft MLLW, it would be 120 feet wide to allow one-way traffic of vessels 150 feet in length with a 34-foot beam and 10.5 foot draft. The mooring basin would be dredged to a depth of -17 ft MLLW and would provide room for 37 vessels.

**Local Cooperation.** A Preconstruction Engineering and Design Agreement was signed on 10 July 1998.

**Operations during fiscal year.** Pacific Ocean Division approved the feasibility report on 14 May 1998. Plans and specifications are being developed and Steller Eider surveys are conducted every winter.

## 11. SEWARD HARBOR, AK

**Location.** Seward, located on the Kenai Peninsula is about 125 miles south of Anchorage, Alaska by road. The town is located at the northern end of Resurrection Bay off the Gulf of Alaska and can be reached by air, sea and rail as well as road. It lies at about 60 degrees 6 minutes N Latitude and 149 degrees 2 minutes W longitude.

**Existing Project.** The current harbor is filled to capacity with a waiting list of more than 330 boats. The Feasibility Report recommends expansion of the existing harbor eastward. The recommended project would accommodate 339 additional vessels and cost \$11,930,000.

**Local Cooperation.** A Pre-construction Engineering and Design Agreement was signed on 23 April 1999.

**Operations during fiscal year.** The feasibility study was completed 28 September 1998. Plans and specifications were initiated and are scheduled to be completed. No federal construction funding was available for the project, so plans and specifications were delayed. The plans and specifications will be prepared in fiscal year 2002 and a PCA negotiated with the City of Seward.

## 12. ST. GEORGE, AK

**Location.** The city of St. George is located on St. George Island, the southernmost island of the Pribilof Islands, near the edge of the southwest Bering Sea shelf.

**Existing project.** The project was authorized in the Energy and Water Development Appropriations Act of 1993, P.L. 102-377. The work consists of excavating the St. George Harbor entrance channel to 20 feet below mean lower low water in accordance with cost-sharing provisions in P.L. 99-662.

**Local cooperation.** The portion of the project was done by the Local Sponsor under Section 215, P.L. 90-483 with reimbursement to the Local Sponsor by the Government for its share on completion.

**Operations during the fiscal year.** The Local Sponsor completed the portion of the project under the Section 215 agreement. Plans and specifications are being developed. Work on the remainder of the project is scheduled to be initiated in FY 2003.

## 13. ST. PAUL ISLAND HARBOR, AK

**Location.** St. Paul Island Harbor is located on the shore of Village Cove, the southern side of St. Paul Island, the largest and most populated island of the Pribilof group in the central southeast Bering Sea.

**Local cooperation.** The Project Cooperation Agreement was executed on November 24, 1998.

**Operations during the fiscal year.** Congress authorized improvements to the breakwater, the entrance channel, and the maneuvering area in WRDA of 1996. The construction contract for Phase I to build the three underwater reefs was awarded 19 March 1999 for \$10,411,000 and completed in August 2001. A severe scour at the toe of the main breakwater was identified in the Spring of 2001. The Phase I contract was modified to repair the scour, but the contractor was able to complete a small portion of the repair at a cost of approximately \$8 million. The Phase II construction contract for dredging the harbor will be awarded in FY 2003, along with completion of the scour repair.

A small boat harbor was authorized in WRDA 99 and it will be added to the Phase II construction contract.

#### 14. WRANGELL HARBOR, AK

**Location.** Wrangell Harbor is located on the northwest side of Wrangell Island, 824 miles from Seattle and 160 miles from Juneau. (See U.S. Coast and Geodetic Survey Charts Nos. 8164, 8161, and 8201.)

**Existing project.** The project consists of a rubblemound breakwater 300 feet long to protect the southern portion of the outer harbor; a mooring basin 600 feet long, 400 feet wide, and 10 feet deep below mean lower low water within the protected area; an inner basin in the tide flat area east of Shakes Island, 325 feet wide and 550 feet long; a connecting channel 120 feet wide and approximately 530 feet long; a connecting channel 120 feet wide and approximately 530 feet long from the outer mooring basin all at a depth of 10 feet at mean lower low water; and construction of a rock mound breakwater 320 feet long on the reef north of Shakes Island. The range between mean lower low water and mean higher high water is 15.7 feet. The extreme tidal range is 26 feet. Heavy swells, dangerous to small fishing boats, are caused by the wind, which causes an additional rise of about one foot.

Construction of the breakwater north of Shakes Island was placed on inactive status as material to be used from the inner basin was unsuitable and the breakwater considered unnecessary for safe moorage of vessels. The cost of this portion was last revised in 1956 and estimated to be \$6,500. (See table 40-B for authorizing legislation.)

The Heritage Harbor was authorized to be built in the Cemetery Point site in WRDA 99. This project will consist of two breakwaters and dredging an entrance channel and inner harbor area.

**Local cooperation.** The Project Cooperation Agreement will be executed when construction funds are appropriated.

**Terminal facilities.** There are eight wharves and floats in Wrangell Harbor. Two privately owned wharves serving general cargo and passenger terminals, one of which includes a cold storage facility, are open for public use. The remaining wharves serve various industrial purposes. One of the floats is publicly owned and is open for public use for mooring and servicing of small craft, and two privately owned floats serve oil-handling facilities.

**Operations during fiscal year.** A feasibility study for a new harbor was initiated in FY 97 and the project was authorized in WRDA 99. The Design agreement was executed on 3 Dec 99 and plans and specifications are being developed.

#### 15. WRANGELL NARROWS, AK

**Location.** Wrangell Narrows is located between Mitkof and Kupreanof Islands adjacent to Petersburg and is approximately 120 miles from Juneau. Wrangell Narrows is part of the Inside Passage, the protected navigation route between the Pacific Northwest and Southeast Alaska. The natural alternate route to Wrangell Narrows is the open sea passage around Cape Decision which is 90 miles longer and hazardous for all but the larger vessels.

**Existing project.** Wrangell Narrows is a 24-mile long channel that is 300 feet wide and dredged to -24 feet MLLW, except at Turn Point and an anchorage basin. In 1963, a 20.7-acre anchorage basin was added with an authorized depth of -26 feet MLLW. Turn Point was widened through the turn in 1970 and re-authorized to a depth of -27 feet MLLW. Tidal range between mean lower low water and mean higher high water is approximately 14 feet. Extreme range is 25 feet.

**Local cooperation.** Fully complied with.

**Terminal facilities.** City, Coast Guard, and several privately owned docks plus a State ferry terminal exist at the city of Petersburg. Several privately owned docks also exist throughout the narrows.

**Operations during fiscal year.** Annual maintenance dredging was carried out by Western Marine in October through March with the blasting and removal of 33,939 cubic yards of rock and shoal materials.

#### Flood Control

#### 16. BETHEL BANK STABILIZATION, AK

**Location.** Bethel, AK is located in southwestern Alaska on the north bank of the Kuskokwim River 400 miles west of Anchorage.

**Existing project.** The project consists of rock riprap toe protection to be installed on the unprotected riverbank and at locations where existing city construction bulkheads are threatened by erosion. This includes 4,000 feet of unprotected riverbank and 4,200 feet of previously installed bulkheads. The construction contract was awarded on 26 May 1995. Emergency erosion protection for the Bethel Cargo Dock and the Mission Road Bulkhead began in July 1995 and continued through FY 1995 due to accelerated erosion that accumulated after spring runoff.

**Location cooperation.** A Project Cooperation Agreement was signed on 3 March 1994.

**Terminal facilities.** The POL tank farm is situated at the downstream end of the project and the city's general cargo dock is at the upstream end of the project.

**Operations during fiscal year.** The project was physically complete in September 1997. The total project cost was \$24,000,000 of which Bethel contributed \$6,000,000. Credit for land and rights of way is pending. An FY01 Congressional Add authorized and directed the Corps to extend the existing project an additional 1,200 feet upstream. A post authorization letter report was prepared in FY01.

## 17. CHENA RIVER LAKES, AK

**Background.** For details, see Annual Report for FY00.

**Operations during fiscal year.** No flood or high water events occurred on the Chena River. The project had a very successful recreation season supported by volunteer hosts. A 5-year Reimbursable Services Agreement was signed with USGS for data collection and maintenance of ground water monitoring wells. An inspection was performed on all piezometer wells. Phase I of a complete boundary survey was performed.

## 18. DILLINGHAM EMERGENCY BANK STABILIZATION, AK

**Location.** Dillingham is located 350 miles southwest of Anchorage, Alaska. The project is located along the southeastern edge of Dillingham adjacent to the Nushagak River. Erosion of the toe of the bluff in this area is endangering critical utilities and numerous buildings and homes.

**Existing project.** The authorized project consists of a 1,600-foot long steel sheetpile bulkhead along the toe of the

bluff from the Dillingham City Cargo dock to Snag Point. An additional 600 feet of bulkhead with riprap revetment was constructed at the small boat harbor. The sheetpile wall will be constructed to an elevation of 28 feet MLLW. Mitigation measures including emergency access ladders and eyebolts for anchoring setnets used for by subsistence fishermen are included in the project.

**Local cooperation.** A Project Cooperation Agreement was signed in January 1998.

**Terminal Facilities.** Dillingham has a general cargo dock adjacent to the authorized project.

**Operations during fiscal year.** A construction contract was awarded in September 1998 in the amount of 1,798,850. Construction of the project was performed and a mod was awarded for \$1,389,472. A second construction contract was awarded to complete the construction of the storm drain removed from the original contract. Extension of the project was directed in the FY 2001 Appropriation Conference Report. Plans and specifications are being developed and a PCA negotiated.

## 19. GALENA EMERGENCY BANK STABILIZATION

**Location.** Galena is located on the north bank of the Yukon River, 45 miles east of Nulato and 270 air miles west of Fairbanks.

**Existing project.** The project consists of a rock revetment along the Yukon River to protect the City of Galena from river erosion. In 1987, the Corps of Engineers constructed 1300 feet of riprap revetment protection along the river. The project is currently being out-flanked at the ends of the revetment by the river erosion. Approximately 600 feet of additional revetment protection is required. Continued erosion and yearly ice breakups along the Yukon river are causing imminent danger to local facilities. Vital facilities, including barge facilities, utilities, and roads are in potential danger of being destroyed in the next year or two. Immediate action to protect these facilities is recommended because erosion is advancing at an accelerated pace in one area.

**Local cooperation.** The sponsor, the City of Galena supports the project. Geotechnical studies and surveys were conducted in FY 2001. A Letter Report, which will include required formulation, economic, engineering, design, cost estimates, and environmental documentation and a Project Cooperation Agreement was initiated in FY 2001. The PCA will be executed and a construction contract awarded in FY 2003.

**Terminal facilities.**

## 20. KAKE DAM

**Location.** The city of Kake is located in southeast Alaska on the northwest shore of Kupreanof Island and has a population of approximately 700 residents, about 95 percent of which are Alaska natives. It is a Tlingit village with a fishing, logging, and subsistence lifestyle.

**Existing project.** Project is to construct a replacement dam on Gunnuk Creek in Kake, AK to provide drinking water and hydroelectricity. The recommended plan calls for construction of a gravity concrete dam approx. 53 feet upstream from the previous dam, covering an area about 4,750 ft<sup>2</sup>, and a spillway height of 23 feet.

**Local cooperation.** Construction, General funds will be reprogrammed within available funds into the project. A letter report is being prepared, which will include required formulation, economic, engineering, design, cost estimates, and environmental documentation. The hydroelectric segment will be evaluated and, if warranted, FERC licensing procedures initiated. Plans and specifications are being prepared. The project will be 100 percent federally funded with the Sponsor providing all of the necessary LERRD. The project will be turned over to the City of Kake for operation and maintenance after construction completion.

**Terminal facilities.**

## 21. FLOOD CONTROL WORK UNDER SPECIAL AUTHORIZATION

**Emergency flood control activities--repair, flood fighting, and rescue work (Public Law 99, 84th Congress, and antecedent legislation).**

Federal costs for the fiscal year were \$291,899 for disaster preparedness, and field investigations.

## 22. INSPECTION OF COMPLETED FLOOD CONTROL PROJECTS

Inspections were made of the following flood control works: Bethel Bank Stabilization at Bethel; Deering Streambank Protection at Deering; Metlakatla Erosion Protection at Metlakatla; Homer Spit Revetments at Homer; Tanana River Levee at Fairbanks, Talkeetna River at Talkeetna; Lowell Creek at Seward; Klutina River at Copper Center; Skagway River at Skagway; Gold Creek at Juneau; and Emmonak Streambank Protection on the Yukon River at Emmonak. An inspection was made of the shore protection works at Nome.

## General Investigation

## 23. SURVEYS

Fiscal year costs were \$3,279,453 of which \$2,765,049 was for navigation studies, \$ 0 for flood damage prevention studies, \$198,340 for special studies, \$111,868 for miscellaneous studies, and \$149,092 for coordination studies with other agencies. In addition contributed funds in the amount of \$800,862 were expended for General Investigation's Feasibility Studies: \$112,398 for Delong, \$135,977 for Valdez and \$82,452 for PAS-Kivalina.

## 24. COLLECTION AND STUDY OF BASIC DATA

Technical assistance, information, flood plain management guidance, and other flood plain management services have been provided to military and nonmilitary Federal agencies, local communities, state agencies, Architectural Engineering firms, lending institutions, and private individuals at a fiscal year cost of \$185,289.

Fiscal year costs for Hydrologic Studies were \$14,995.

## 25. PRECONSTRUCTION ENGINEERING AND DESIGN

None

REPORT OF THE SECRETARY OF THE ARMY ON CIVIL WORKS ACTIVITIES FOR 2001

TABLE 32-A COST AND FINANCIAL STATEMENT

See Section In Text	Project	Funding	FY 98	FY 99	FY 00	FY 01	Total to 30 Sep 01
1.	Anchorage Harbor, AK	New Work					
		Approp.	—	—	—		533,235
		Cost	—	—	—		533,235
		Maint.					
		Approp.	1,849,400	1,650,210	6,816,434	3,414,043	44,839,199
		Cost	967,277	1,657,733	6,812,665	3,058,210	44,466,322
	(Contrib. Funds)	Maint.					
		Contrib.					638,080
		Cost	—	—	—		638,080
2.	Cook Inlet Navigation, AK	New Work					
		Approp.	4,488,928	179,000	2,837,000	230,030	8,287,958
		Cost	338,426	3,979,208	3,133,052	284,402	8,287,709
		Maint.					
		Approp.					
		Cost	—	—	—		
	(Contrib. Funds)	New Work					
		Approp.	—	25,000	2,428,000		2,797,031
		Cost	—	25,000	1,483,671	547,027	2,399,672
3.	Chignik Harbor, AK	New Work					
		Approp.	—	166,000	97,000	299,000	918,699
		Cost	86	214,978	108,929	264,664	887,236
		Maint.					
		Approp.					
		Cost	—	—	—		
	(Contrib. Funds)	New Work					
		Approp.	701	—	—	100,000	192,660
		Cost.	—	—	—	-	91,258
4.	Dillingham Harbor, AK	New Work					
		Approp.	—	—	—		
		Cost	—	—	—		
		Maint.					
		Approp.	383,000	389,076	379,152	727,510	11,905,720
		Cost	386,332	390,355	381,114	724,582	11,917,397
	(Contrib. Funds)	New Work					
		Approp.	—	—	—		
		Cost.	—	—	—		1,700
							1,700
5.	False Pass Harbor, AK	New Work					
		Approp.	—	150,000	230,000	-10000	370,000
		Cost	—	67,962	252,472	46,436	366,870
		Maint.					
		Approp.					
		Cost	—	—	—		
	(Contrib. Funds)	New Work					
		Approp.	—	85,000	222,113		307,113
		Cost	—	23,648	219,312		304,854

ALASKA DISTRICT

**TABLE 32-A**                      **COST AND FINANCIAL STATEMENT**  
**(Continued)**

See Section In Text	Project	Funding	FY 98	FY 99	FY 00	FY 01	Total to 30 Sep 01
6.	Homer Harbor, AK	New Work	—	—	—		3,512,350
		Approp.	—	—	—		3,512,350
		Cost					
		Maint.	149,800	194,333	195,325	185,937	6,373,508
		Approp.	147,221	198,107	195,766	187,087	6,053,680
		Cost					
		Rehab.	—	—	—		
		Contrib.	—	—	—		67,974
		Cost					67,974
7.	Kake Harbor, AK	New Work					
		Approp.	3,381,000	6,779,000	4,279,000	803,000	15,536,658
		Cost	2,735,073	6,580,523	4,931,274		15,532,789
		Maint.					
	(Contrib. Funds)	Approp.	580,000	632,000	375,000		1,971,000
		Cost	53,856	509,710	764,683		1,587,001
8.	Ninilchik Harbor, AK	New Work					
		Approp.	—	—	—		428,720
		Cost	—	—	—		428,720
		Maint.					
		Approp.	160,800	187,451	193,859	177,914	5,875,463
		Cost	159,906	188,825	195,361	178,725	5,875,662
9.	Sitka Harbor, AK	New Work					
		Approp.	—	—	—	65,000	6,704,144
		Cost	2061	—	—	37,474	6,606,754
	(Contributed Funds)	New Work					
		Approp.	—	—	325,000		1,238,400
		Cost	17,663	5624	—		1,240,519
10.	St. George, AK	New Work					
		Approp.	—	—	—	79,940	7,079,940
		Cost	58	—	9,375	60,760	5,087,942
	(Contrib. Funds)	New Work					
		Approp.	—	—	—		3,004,000
		Cost	554	—	—		2,777,682
11.	St. Paul Island Harbor, AK	New Work					
		Approp.	339,000	2,313,000	4,254,452	4,611,000	26,898,200
		Cost	229,584	1,570,220	4,765,051	4,747,508	26,141,257
		Maint.					
		Approp.	—	4987	195,010	-10	425,464
		Cost	—	4987	195,000		425,464
	(Contrib. Funds)	New Work					
		Approp.	—	—	1,593,450		1,819,836
		Cost.	—	—	200,000	195,321	620,681

**TABLE 32-A**                      **COST AND FINANCIAL STATEMENT**  
**(Continued)**

REPORT OF THE SECRETARY OF THE ARMY ON CIVIL WORKS ACTIVITIES FOR 2001

See Section In Text	Project	Funding	FY 98	FY 99	FY 00	FY 01	Total to 30 Sep 01
12.	Unalaska Harbor, AK	New Work					
		Approp.	—	191,000	101,000	247,114	539,114
		Cost	—	80,445	204,320	226,728	511,493
	(Contrib. Funds)	New Work					
		Approp.	—	224,662	150,000		374,662
		Cost	—	356	245,576	102,285	348,217
13.	Bethel Bank Stabilization, AK	New Work					
		Approp.	2,384,000	936,000		350,000	19,834,854
		Cost	2,406,578	957,145	16,327	257,704	19,519,142
	(Contributed Funds)	New Work					
		Approp.	—	—	—		4,690,000
		Cost	—	—	—		4,275,000
14.	Chena River Lakes, AK	New Work					
		Approp.	—	—	—	-9000	214,054,928
		Cost	—	—	—		214,054,134
		Maint.					
		Approp.	1,825,500	3,066,448	2,124,267	1,296,335	20,145,632
		Cost	1,246,709	3,725,421	2,131,442	1,301,289	18,162,781
	(Contrib. Funds)	New Work					
		Approp.	—	—	12,000		2,194,300
		Cost	—	—	12,000		2,157,929
15.	Dillingham Emergency Bank Stabilization	New Work					
		Approp.	-84,000	2,400,000	-80,000	350000	5,032,515
		Cost	125,079	3,484,210	478,403	155,795	4,796,832
16.	Homer Spit Erosion, AK	New Work					
		Approp.					7,540,000
	(Contrib. Funds)	Cost	713,382	12,692	38,880	314	4,166,263
		New Work					
		Approp.		—	—		1,605,522
		Cost	1,274,934	—	—		2,781,128



**Table 32-B AUTHORIZING LEGISLATION**

See Section in Text	Date Authorizing Act	Project and Work Authorized	Documents
1.	Jul. 3, 1958 Oct. 22, 1976	<b>ANCHORAGE HARBOR, AK</b> Deep winter harbor, adjacent to docks, dredge to 35 feet below mean lower low water, protected by two jetties. <sup>1</sup> Extension of project limits.	H.Doc. 34, 85th Cong., 1st Sess. <sup>2</sup> P.L. 94-587
3.	Oct. 12, 1996	<b>COOK INLET NAVIGATION, AK</b> Deepen the entrance channel to -30 feet. Enlarge and deepen the maneuvering basin to -29.0 feet with an area of 415 by 830 feet. Wave spending beach to +4 feet. Three offshore reefs each, 1,300 feet long, constructed to a depth of -12 feet. Wave energy channel 100 feet wide with bottom elevation of +2 feet.	Section 101(b)(2), Water Resources Development Act of 1996. Energy and Water Development Appropriations Act, 1999. P.L. 105-245.
3.	Oct. 12, 1996	<b>CHIGNIK HARBOR, AK</b> Deepen the entrance channel to -30 feet. Enlarge and deepen the maneuvering basin to -29.0 feet with an area of 415 by 830 feet. Wave spending beach to +4 feet. Three offshore reefs each, 1,300 feet long, constructed to a depth of -12 feet. Wave energy channel 100 feet wide with bottom elevation of +2 feet.	P.L. 104-303, Water Resources Development Act of 1996. FY 1999 Congressional Add
4.	Jul. 3, 1958	<b>DILLINGHAM HARBOR, AK</b> Basin 230,000 square feet in area with depth of 2 feet above MLLW along Scandinavian Creek, with entrance channel 1,100 feet long and 40 feet wide.	H. Doc. 390, 84th Cong., 2d Sess. <sup>2</sup>
5.	Oct. 31, 2000	<b>FALSE PASS HARBOR, AK</b> Dredging of the inner basin and the entrance channel to accommodate a fleet of 88 vessels in a 5.2 acre basin protected by two rubble-mound breakwaters, 1,300 feet and 600 feet in length.	House Report 106-1020, Section 101 (b)(1) (2), Water Resources Development Act of 2000, 106 <sup>th</sup> Congress
6.	Jul. 3, 1958	<b>DOUGLAS HARBOR, AK</b> Basin 5.2 acres with entrance channel both to a depth of -12 feet MLLW and protected by a rock jetty about 90 feet long off the northerly shore of Juneau Isle adjacent to the basin entrance.	H. Doc. 286, 84th Cong., 2d Sess. <sup>2</sup>
7.	Jul. 2, 1958 Aug. 19, 1964	<b>HOMER HARBOR, AK</b> Basin 2.7 acres in area with depth of 12 feet below mean lower low water, and rock breakwater 1,260 feet long. Relocation and rehabilitation of project destroyed by March 27, 1964 earthquake, by construction of basin 10 acres in area with 12-foot depth over 2.75 acres and 15-foot depth over 7.25 acres protected by rock breakwaters, 1,018 feet and 238 feet long.	H.Doc. 34, 85th Cong., 1st Sess. <sup>2</sup> P.L. 88-451
	Jul. 14, 1960	Increased width and depth of entrance channel and an enlarged staging area. Basin enlarged from 16.5 to 50 acres.	Section 107, P.L. 86-645 Authorized by Chief of Engineers, Nov. 13, 1981
8.	Aug. 13, 1968	<b>KAKE HARBOR, AK</b> Provides for a 1,580 foot long west breakwater and a 900 foot long south breakwater enclosing a 7 acre berthing area at -15 feet MLLW.	S. Doc. 249, 75th Cong., 1st Sess.

**Table 32-B**  
**(Continued)** **AUTHORIZING LEGISLATION**

See Section in Text	Date Authorizing Act	Project and Work Authorized	Documents
9.	Mar. 2, 1945	<b>METLAKATLA HARBOR, AK</b> Dredging small boat basin 2.18 acre in extent to a depth of 10 feet below plane of mean lower low water; construction of rubblemound breakwater 900 feet long.	H.Doc. 138, 76th Cong., 91st Sess.
	Oct. 27, 1965	Entrance channel and two rubblemound breakwaters enclosing a 7.0 acre basin.	Section 201, P.L. 89-298 S. Doc. 92-64, 92d Cong., 2d Sess. <sup>2</sup> Authorized Oct. 12, 1972
10.	Jul. 3, 1958	<b>NINILCHIK HARBOR, AK</b> Basin 320 feet long by 150 feet wide with depth of 2 feet above mean lower low water, approach channel 400 feet long and 50 feet wide with depth of 9 feet above mean lower low water, protected by 410 foot jetty.	H.Doc. 34, 85th Cong., 1st Sess. <sup>2</sup>
11.	Aug. 8, 1917	<b>NOME HARBOR, AK</b> Two jetties, easterly 335 feet and westerly 460 feet long re- vetment, channel and basin 200 feet wide and 250 feet long.	H.Doc. 1932, 64th Cong., 1st Sess. <sup>2</sup>
	Aug. 30, 1935	Extension of the jetties and enlarging basin to 250 feet wide and 600 feet long. <sup>3</sup>	H.Doc. 404, 71st Cong., 2d Sess., and Rivers and Harbors Committee Doc. 38, 73d Cong., 2d Sess.
	Jun. 16, 1948	Seawall	Reports of Chief of Engineers dated March 8, 1948
	Aug 17, 1999	New entrance to Nome Harbor; 2,986 feet long breakwater; 230 feet long causeway spur; 3,450 feet long entrance channel with depth to 22 feet; sediment traps and causeway bridge.	Report of Chief of Engineers as amended, dated August 2, 1999. Section 101 (a) (3), P.L. 106-53 Water Resource Development Act of 1999, 106th Cong.
12.	Aug 17, 1999	<b>OUZINKIE HARBOR, AK</b> Adding approximately 300 ft of breakwater and dredging at the entrance channel of rock pinnacles.	Section 302, P.L. 106-53 Water Resource Development Act of 1999, 106th Cong.
13.	Aug 17, 1999	<b>SAND POINT HARBOR, AK</b> Construct a mooring basin adjacent and south of the existing harbor. It incorporates the southern breakwater and causeway to the city dock by extending the existing breakwater.	Section 101 (a) (3), P.L. 106-53 Water Resource Development Act of 1999, 106th Cong.
14.	Aug 17, 1999	<b>SEWARD HARBOR, AK</b> Provide more moorage space. Project would accommodate 339 additional vessels.	Section 101 (a) (3), P.L. 106-53 Water Resource Development Act of 1999, 106th Cong.
15.	Oct 31, 1992	<b>SITKA HARBOR, AK</b> Boat harbor consisting of 3 rubblemound breakwaters.	Water Resources Development Act of 1992, H. Doc. 103-37, 103 <sup>rd</sup> Cong., 1 <sup>st</sup> Sess.

**Table 32-B**  
**(Continued)**

**AUTHORIZING LEGISLATION**

See Section in Text	Date Authorizing Act	Project and Work Authorized	Documents
16.	Nov. 17, 1986	<b>ST. GEORGE, AK</b> Dredging the maneuvering area from an average depth of 3 feet above mean lower low water to 18 feet below mean lower low water and dredging the entrance channel from an average depth of 14 feet below mean lower low water to 20 feet below mean lower low water.	Section 107 of The Rivers and Harbors Act of 1960, Public Law 86-645, as amended.
17.	Nov. 17, 1986	<b>ST. PAUL ISLAND, AK</b> Add 1,050 feet of breakwater at existing crest height, 37 below feet mean lower low water and 1,000 feet long with a crest height of 18 above mean lower low water.	Section 202, P.L. 99-662
	Oct. 12, 1996	Deepen the entrance channel to -30 feet. Enlarge and deepen the maneuvering basin to -29.0 feet with an area of 415 by 830 feet. Wave spending beach to +4 feet. Three offshore reefs each, 1,300 feet long, constructed to a depth of -12 feet. Wave energy channel 100 feet wide with bottom elevation of +2 feet.	Section 101(b)(3), P.L. 104-303 Water Resources Development Act of 1996.
	Aug 17, 1999	Added small boat harbor with entrance channel and maneuvering area to -20MLLW and appropriate wave protection features.	Section 302, P.L. 106-53 Water Resource Development Act of 1999, 106th Cong.
19.	Sep. 22, 1922	<b>WRANGELL HARBOR, AK</b> Breakwater 300 feet long to protect southern portion of harbor. Mooring basin 600 feet long, 400 feet wide, and 10 feet deep.	H.Doc. 161, 67th Cong., 2d Sess.
	Aug. 30, 1935 Mar. 2, 1945	Inner basin and connecting channel from the existing mooring basin, both 10 feet deep at mean lower low water, and breakwater 320 feet long on the reef north of Snakes Island.	H.Doc. 202, 72nd Cong., 1st Sess. H.Doc. 284, 76th Cong., 1st Sess.
	Aug 17, 1999	Project for navigation, Heritage Harbor, AK	Section 101 (a) (3), P.L. 106-53 Water Resource Development Act of 1999, 106th Cong.
20.	Nov. 17, 1986	<b>BETHEL BANK STABILIZATION, AK</b> Streambank protection by placing riprap along 8,500 feet of river-bank.	Section 202, P.L. 99-662
21.	Aug. 13, 1968	<b>CHENA RIVER LAKES, AK</b> Provides for construction of a dam and floodway for the Chena River (17 miles east of Fairbanks) for a dam and reservoir on the Little Chena River, and for a 27 mile long levee system with interior drainage works on the north side of the Tanana River.	H. Doc. 148, 90th Cong., 2nd Sess. P.L. 90-483
22.	Dec. 19, 1985	<b>DILLINGHAM EMERGENCY BANK STABILIZATION, AK</b> Install 1,600 feet of steel sheetpile bulkhead along the toe of the bluff from the Dillingham city cargo dock to Snag Point.	Sec. 114 P.L. 99-190

**Table 32-B  
(Continued)**

**AUTHORIZING LEGISLATION**

<b>See Section in Text</b>	<b>Date Authorizing Act</b>	<b>Project and Work Authorized</b>	<b>Documents</b>
23.	Nov. 28, 1990	<b>HOMER SPIT, AK</b> Extension of an existing rubblemound revetment along an existing sheetpile wall to provide protection and nourishment along a 1400 foot portion of State highway.	Sec. 101, Water Resource Development Act of 1990, P.L. 101-640, 101st Cong.
	Nov. 13, 1995		P.L. 104-65, Energy and Water Development Appropriation Act of 1996

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1. Purchase of dredge and deepwater jetties deauthorized November 6, 1977 under section 12, Public Law 93-251.	3. Extension of jetties classified "inactive".
2. Contains latest published map.	4. Little Chena Dam deauthorized in 1991.

**TABLE 32-C OTHER AUTHORIZED NAVIGATION PROJECTS**

Project	Status	For Last Full Report See Annual Report for	Construction	Cost to Sep. 30, 1994
				Operation and Maintenance
Apoon Mouth of Yukon River, AK <sup>1</sup>	Completed	1920	128,896	2,154
Bar Point Harbor, AK <sup>2</sup>	Completed	1983	2,000,000 <sup>3</sup>	
Bethel Small Boat Harbor, AK	Completed	1985	1,520,272	
Cook Inlet Shoals, AK	Completed	1977	1,220,000	5,000
Cordova Harbor, AK <sup>2</sup>	Completed	1978	843,534	488,156
Cordova, AK	Completed	1986	9,642,000	
Craig Harbor, AK	Completed	1983	1,033,500 <sup>4</sup>	72,500
Douglas Harbor, AK	Completed	1963	282,019	
Dry Pass, AK	Completed	1983	943,351	23,466
Egegik River, AK	Completed	1972	4,441	3,107
Elfin Cove, AK	Completed	1959	154,191	
Gastineau Channel, AK	Completed	1964	789,461	102,701
Haines Harbor, AK <sup>2</sup>	Completed	1977	1,000,000 <sup>5</sup>	
Homer Harbor, AK <sup>2</sup>	Completed	1987	2,000,000	
Hoonah Harbor, AK	Completed	1983	4,255,000 <sup>6</sup>	
Humboldt Harbor, AK	Completed	1977	3,679,683 <sup>7</sup>	
Iliuliuk Harbor, AK	Completed	1941	66,037	
Juneau Harbor, AK	Completed	1974	1,381,150	260,991
Kake Harbor, AK	Completed	1991	870,700	
Kasilof Harbor, AK <sup>2</sup>	Completed	1975	109,848	
Ketchikan Harbor, AK	Completed	1979	1,602,417	331,256
Kodiak Harbor, AK	Completed	1973	1,891,212 <sup>8</sup>	37,946
Mekoryuk, AK	Completed	1986	1,372,139	
Myers Chuck Harbor, AK	Inactive	1970	9,700	
Naknek River, AK	Completed	1961	20,789	
Neva and Olga Straits, AK	Completed	1960	155,009	
Old Harbor, Kodiak Island, AK <sup>2</sup>	Completed	1972	370,415	132,946
Pelican Harbor, AK	Completed	1964	369,683	18,973
Petersburg Harbor, AK	Completed	1972	252,932	26,800
Port Alexander, AK	Completed	1949	17,000	
Port Lions, AK <sup>2</sup>	Completed	1986	1,825,311	
Rocky Pass, AK	Completed	1960	337,668	
St. Michael Canal, AK	Completed	1916	377,062	560
Seldovia Harbor, AK	Completed	1974	1,051,883 <sup>9</sup>	5,518
Sergius Whitestone, AK	Completed	1973	1,798,010	1,934
Seward Harbor, AK	Completed	1973	712,369 <sup>10</sup>	219,789
Sitka Harbor, AK	Completed	1973	1,611,009	15,400
Skagway Harbor, AK	Completed	1972	133,180	32,665
Stikine River, AK	Completed	1987		8,804
Valdez Harbor, AK	Completed	1968	649,740 <sup>11</sup>	221,498
Wrangell Narrows, AK	Completed	1979	3,562,343	309,260

1. Abandonment recommended in H.Doc. 467, 69th Cong., 1st Sess.

2. Authorized by Chief of Engineers (Sec. 107).

3. In addition, \$272,779 of State funds.

4. Includes \$656,240 for Sec. 107 project.

5. In addition, \$925,500 of State funds.

6. In addition, \$973,875 of State funds.

7. In addition, \$857,000 of State funds.

8. Includes \$594,163 for rehabilitation.

9. Includes \$400,000 for rehabilitation.

10. Includes \$90,026 for rehabilitation and \$2,528 Code 710. Recreation facilities at Completed projects.

11. Includes \$73,000 for rehabilitation and \$2,713 Code 710. Recreation facilities at Completed projects.

**TABLE 32-E****OTHER AUTHORIZED FLOOD CONTROL PROJECTS**

<b>Project</b>	<b>Status</b>	<b>For Last Full Report See Annual Report for</b>	<b>Construction</b>	<b><u>Cost to Sep. 30, 1994</u></b>	
				<b>Operation and Maintenance</b>	
Bethel Bank, Kuskokwim River <sup>1</sup>	Completed	1985	553,970		
Fairbanks, Tanana River & Chena Slough, AK	Completed	1943	557,000		
Gold Creek, AK	Completed	1975	876,006 <sup>2</sup>		4,301
Klutina River, Copper Center, AK <sup>3</sup>	Completed	1973	260,681		
Lowell Creek, AK <sup>4</sup>	Completed	1945	416,382 <sup>5</sup>		30,771
Salmon River, AK	Completed	1963	37,770 <sup>6</sup>		162,925 <sup>8</sup>
Talkeetna River, AK	Completed	1981	516,694		

1. Section 14.

2. In addition, \$25,000 expended from contributed funds.

3. Authorized by Chief of Engineers (Sec. 205).

4. During FY88, \$551,690 was expended from FC and CE.

5. In addition \$25,000 expended from contributed funds.

6. Includes \$34,197 of PWA funds.

7. In addition, \$7,000 expended from contributed funds.

8. In addition, \$27,400 expended from contributed funds.

**TABLE 32-G****DEAUTHORIZED PROJECTS**

<b>Project</b>	<b>For Last Full Report See Annual Report for</b>	<b>Date Deauthorized</b>	<b>Federal Funds Expended</b>	<b>Contributed Funds Expended</b>
Allison Lake, AK (Valdez Hydropower)		1992		
Anchorage Harbor, AK (Uncompleted Portion)	1967	1977		
Bradley Lake, AK 1983	1983	1982	46,701,000	
Ketchikan Harbor, AK (West Breakwater)	1979	1979		
Port Alexander, AK (Inner Harbor)	1949	1977		
Tolovana River, AK (Snagging)	1931	1977		
Little Chena River Dam	1983	1990		
Long Lake Dam	1975	1990		
Myers Chuck Harbor, AK	1970	1991	9,700	
Scammon Bay, AK		1992		
Skagway River, AK	1966	1991	26,385	

**TABLE 32-H**

**NAVIGATION WORK UNDER  
SPECIAL AUTHORIZATION  
NAVIGATION ACTIVITIES PURSUANT TO SECTION 107,  
PUBLIC LAW 86-645, AS AMENDED  
(PREAUTHORIZATION)**

Study Identification	Fiscal Year Costs
AK Environmental	1,154,000
Coordination Account	35,494
King Cove, AK	-1,131
Ketchikan, AK	17,482
Kokanok Harbor, AK	7,512
Larsen Bay, AK	4,112
Metlakatla, AK	1,642
Ouzinkie, AK	307,075
Tatitlek, AK	26,987
Haines, AK	40,373
Unalaska, AK	0
<b>TOTAL</b>	<b>1,593,845</b>

**TABLE 32-I**

**PROJECT CONDITION SURVEYS**

Name of Project Date	Date Survey Conducted
Cordova Harbor	June 2000
Douglas Harbor	May 2000
Dry Pass Channel	May 2000
Haines Small Boat Harbor	May 2000
Kodiak, Near Is. Channel and St. Herman's Harbor	June 2000
Petersburg, North Harbor	May 2000
Seldovia Harbor and Deep Draft Channel	June 2000
Skagway Small Boat Harbor and Deep Draft Dock	May 2000
Valdez Small Boat Harbor	June 2000



**TABLE 32-J**

**STREAM BANK EROSION WORK UNDER  
SPECIAL AUTHORIZATION  
EROSION ACTIVITIES PURSUANT TO SECTION 14,  
PUBLIC LAW 79-526, AS AMENDED  
(PREAUTHORIZATION)**

<b>Study Identification</b>	<b>Fiscal Year Costs</b>
Coordination Account	17,332
Noatak, AK	1,175
Big Delta State Historical Park, AK	17,621
McGrath	12,682
Akiak	24,017
Kotlik	6,078
Northway	7,343
TOTAL	86,248

**TABLE 32-K**

**ENVIRONMENTAL ACTIVITIES  
PURSUANT TO SECTION 1135,  
PUBLIC LAW 99-662**

<b>Study Identification</b>	<b>Fiscal Year Costs</b>
Coordination Account	2,987
Preliminary Restoration Plan	963
Gold Creek Salmon Restoration, AK	21,934
TOTAL	25,884

**TABLE 32-L**

**AQUATIC ECOSYSTEM RESTORATION  
PURSUANT TO SECTION 206,  
PUBLIC LAW 104-303**

<b>Study Identification</b>	<b>Fiscal Year Costs</b>
Swiftwater Park Recreation, AK	227,652
TOTAL	227,652